

WORKING HARD FOR YOU

Under the Safe Drinking Water Act (SDWA), USEPA is responsible for setting national limits for hundreds of substances in drinking water and also specifies various treatments that water systems must use to remove these substances. In California, each system continually monitors for these substances and reports directly to the State Water Resources Control Board (SWRCB) if they were detected in the drinking water. USEPA uses this data to ensure that consumers are receiving good water and to verify that states are enforcing the laws that regulate drinking water.

This publication conforms to the regulation under SDWA requiring water utilities to provide detailed water quality information to each of their customers annually. We are committed to providing you with this information about your water supply because customers who are well informed are our best allies in supporting improvements necessary to maintain the highest drinking water standards.

COMMUNITY PARTICIPATION

You are invited to participate in our public forum and voice your concerns about your drinking water. We meet on the first and third Tuesday of every month beginning at 6:00 p.m. at the City Council Chambers, 383 Main Street, Brawley, CA.

Este reporte contiene informacion sobre su agua potable. Si usted no lo entendio, pida que sea traducido por un amigo o alguien que lo entienda.

QUESTIONS?

EPA Call U.S. EPA's Safe Drinking Water Hotline at 1-800-426-4791



City of Brawley Water Treatment Plant
760 Willard Avenue
Brawley, CA 92227

2016 Water Quality Report



Proudly Prepared By
City of Brawley



Where Does My Water Come From?

The City of Brawley customers are fortunate because we enjoy an abundant water supply from the Colorado River. The Water Treatment Plant receives water from the Central Main Canal via the All American Canal.



Substances Expected to be in Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic Contaminants, such as salts and metals, that can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and Herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems, agriculture application.

Radioactive Contaminants, that can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board (SWRCB) prescribed regulations that limit the amount of certain contaminants in water provided by public water systems. SWRCB regulations also establish limits for contaminants in bottled water, they must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Special Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/CDC (Centers for Disease Control) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).



Mark of Excellence

Since the beginning, City of Brawley's goal has been to produce the highest quality drinking water for all its customers. We are proud of our history of quality service. To maintain our commitment to you, our water treatment staff routinely collects and test water samples every step of the way- from the water source right into the distribution system and into your home checking purity and identifying potential problems. Our Water Treatment Division constantly maintains, evaluates and stays abreast of advances in technology, health science and government regulations. Staffed by trained technicians, the lab has latest, most sophisticated instruments, and can measure some substances down to one part per billion. In addition, the City has a comprehensive Cross -Connection Control Program. This program ensures that your water is free from cross contamination from backflow or back siphonage. Through foresight and planning, efficiency in operations, and focus on excellence in customer service, we will provide you the best quality drinking water at an economical price.

For more information about this report, or for any questions relating to your drinking water, please call Rodolfo Nunez, Water Treatment Plant Chief, at 760-344-2698

What's Inside?

This report outlines the processes involved in delivering to you the highest quality drinking water available. We will answer two important questions:

- *Where does my water come from?
- *What is in my drinking water?

Also, we will provide you with information about available resources that will answer other questions on water quality and health effects.

What's In My Water?

We are pleased to report that during the past year, the water delivered to your home or business complied with all of the state and federal drinking water requirements. For your information, we have compiled a list in the table below. We feel it is important that you know exactly what was detected and how much of the substance was present in the water. The state requires us to monitor for certain substances less than once per year because the concentration of these substances do not change frequently. We are pleased to present you the 2016 water quality report.



Chemical or Constituent (and reporting units)	Sample Date	(Average) Level Detected	Range of Results	Sample Date	(Average) Level Detected	Range of Results	MCL (MRDLG)	PHG (MCLG/MRDLG)	Violation	Typical Source of Contaminant
		Raw water			Treated Water					
DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD regulated to protect against possible health effects										
Aluminum (ppb)	4 Quarterly samples in 2016	255	150-340	12 monthly samples in 2016	<50	0-50	1000	600	N/A	Erosion of natural deposits, residue from some surface water treatment processes.
Gross Alpha (pCi/L)	2016	13	N/A	N/A	N/A	N/A	15	0	N/A	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation.
Uranium (pCi/L)	2016	3.2	N/A	N/A	N/A	N/A	20	0	N/A	Erosion of natural deposits
Barium (ppm)	2016	0.13	N/A	N/A	N/A	N/A	1	2	N/A	Discharge of oil drilling wastes and from metal refineries, erosion of natural deposit.
Fluoride (ppm)	2016	0.38	N/A	N/A	N/A	N/A	2	1	N/A	Erosion of natural deposits, water additive that promotes strong teeth, discharge from fertilizer and aluminum factories.
Turbidity (ntu)	N/A	N/A	N/A	2016	05/100%	N/A	TT=1NTU/TT=95% of samples<0.3ntu	N/A	N/A	Soil runoff
Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.										
DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD regulated to protect the odor, taste and appearance of drinking water.										
Aluminum (ppb)	4 Quarterly samples in 2016	255	140-360	12 monthly samples in 2016	<50	0-50	200	NONE		Erosion of natural deposits, residue from some surface water treatment processes.
Iron (ppb)	4 quarterly samples in 2016	170	190-350	12 monthly samples in 2016	23	<20-50	300	NONE		Leaching from natural deposits, industrial wastes.
Color (unfiltered)	2016	10	N/A	N/A	N/A	N/A	15	N/A		Naturally-occurring organic materials
Turbidity (ntu)	2016	16.7	6.5-27.14	N/A	N/A	N/A	5	N/A		Soil runoff
Chloride (ppm)	2016	110	N/A	N/A	N/A	N/A	500	N/A		Naturally-occurring organic materials
Odor Threshold	2016	1	N/A	N/A	N/A	N/A	3	N/A		Naturally-occurring organic materials
Specific Conductance (umhos/cm)	2016	1100	N/A	N/A	N/A	N/A	1800	N/A		Substances that form ions when in water, seawater influence.
Sulfate (ppm)	2016	270	N/A	N/A	N/A	N/A	500	N/A		Runoff/leaching from natural deposits, industrial wastes.
Total Filterable Residue (tdr) (ppm)	2016	690	N/A	N/A	N/A	N/A	1000	N/A		Runoff/leaching from natural deposits.
DISINFECTION BYPRODUCTS,DISINFECTANT RESIDUALS										
Chlorine (ppm)	N/A	N/A	N/A	2016	1.17	1.10-1.28	[4]	[4]		Drinking water disinfectant added for treatment.
THM (PPB)	N/A	N/A	N/A	2016 Highest URAA	49	39-49	80	N/A		By-product of drinking water disinfection sampled quarterly.
HAAS (PPB)	N/A	N/A	N/A	2016 Highest URAA	31	15-31	60	N/A		By-product of drinking water disinfection sampled quarterly.

LEAD AND COPPER (Tap water samples were collected from 30 Homes in the service area)

SUBSTANCE (UNITS)	YEAR SAMPLED	REGULATORY ACTION LEVEL	PHG	AMOUNT DETECTED	HOUSES ABOVE RAL	VIOLATION	TYPICAL SOURCE
COPPER (PPM)	2014	1.3	0.3	0.100	0	NO	Internal corrosion of household water plumbing systems, Erosion of natural deposits, Leaching from wood preservatives.
Lead (ppb)	2014	15	0.2	<.005	0	NO	Internal corrosion of household water plumbing systems, Discharged from industrial manufacturers, Erosion of natural deposits.
VIOLATION OF A MCL, MRDL, AL,TT, OR MONITORING AND REPORTING REQUIREMENT							
Violation	Explanation		Duration	Action taken to Correct the Violation		Health Effects Language	
No Violations							

UNREGULATED CONTAMINANTS, OTHER SUBSTANCES			Typical Source of Contaminant
Substance	Year sampled	Amount Detected Source water	
Calcium (ppm)	2016	82	Leaching from natural deposits.
Potassium (ppm)	2016	5.9	Runoff/leaching from natural deposits.
Ph (ph units)	2016	8.3	a measure of the acidity and alkalinity
Sodium (ppm)	2016	120	Runoff/leaching from natural deposits.
Total Hardness (ppm)	2016	330	Runoff/leaching from natural deposits.
Alkalinity (ppm)	2016	150	Is a measure of the ability of a solution to neutralize acids
Magnesium (ppm)	2016	30	Naturally occurring mineral.
Bicarbonate (ppm)	2016	180	Naturally occurring mineral.
Boron (ppm)	2016	0.062	Runoff/leaching from natural deposits.
Vanadium (ppb)	2016	3.6	Runoff/leaching from natural deposits.

DEFINITIONS TABLE

NTU:	(Nephelometric Turbidity Units). Measurement of the clarity, or turbidity, of water.
ppb:	(parts per billion): One part per billion (or micrograms per liter)
ppm:	(parts per million): One part per million (or milligrams per liter)
pCi/L:	Picocuries per Liter (a measure of radiation).
MRDL:	(Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
MRDLG:	(Maximum Residual Disinfectant Level Goal): The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
IRAA:	Location Running Annual Average.
ND:	Not Detected.
RAL:	(Regulatory Action Level): The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.
MCL:	(Maximum contaminant Level): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) economically and technologically feasible. Secondary MCLs (2nd MCL are set to protect the odor, taste and appearance of drinking water.
MCLG:	(Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.
PHG:	(Public Health Goals): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the CEPA.
Primary Drinking Water Standard or PDWS:	MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
TT:	(Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.
NA:	Not applicable.
NL:	Notification Level

DISINFECTION BYPRODUCTS

Public water systems using chlorine as their primary disinfectant are required by the USEPA and SWRCB to monitor for disinfection by-products. These disinfectants react with natural occurring organic material in the water to produce a variety of DBPs. Among these DBPs are THMs and HAAS. Our quarterly sample analysis has shown results below the MCL. If you would like more information or have concerns, please contact our office.

A source water assessment was conducted for the CENTRAL MAIN CANAL of the City of Brawley water system in October, 2016. This source is considered most vulnerable to these activities for which no associated contaminant has been detected: concentrated animal feeding operations, agricultural activities such as pesticide use and farm chemical distribution, mining, geothermal wells, landfills/dumps, and illegal dumping. City of Brawley is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at Website: www.epa.gov/safewater/lead.

LEAD IN DRINKING WATER

In 2014, the City Of Brawley was required to sample 30 homes for lead and copper. The results of these samples showed levels below the Regulatory Action Level set by the EPA and Water Boards. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. City of Brawley is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at Website: www.epa.gov/safewater/lead.

INFORMATION ON THE INTERNET

WEB SITES PROVIDE A SUBSTANTIAL AMOUNT OF INFORMATION ON MANY ISSUES RELATING TO WATER RESOURCES. WATER BOARDS HAS A WEB SITE (WWW.SWRCB.CA.GOV) THAT PROVIDES COMPLETE AND CURRENT INFORMATION ON WATER ISSUES IN OUR STATE. FOR ADDITIONAL WATER CONSERVATION INFORMATION YOU CAN VISIT THE CITY OF BRAWLEY WEBSITE AT: [HTTP://WWW.BRAWLEY-CA.GOV](http://WWW.BRAWLEY-CA.GOV)

